WE CLAIM:

1. An antenna, comprising:

a plurality of groundplanes configured in a staircase arrangement; and

an array of dipole antenna elements, wherein at least two of the antenna elements are disposed on each of the groundplanes, wherein the antenna elements are also configured in a staircase arrangement such that the antenna elements define a boresight downtilt.

2. The antenna as specified in Claim 1 further comprising a feed network coupled to the array of antenna elements and adapted to selectively adjust a beam downtilt of the antenna.

3. The antenna as specified in Claim 2 further comprising support members supporting the groundplanes in the staircase arrangement.

4. The antenna as specified in Claim 3 further comprising a tray receiving the support members and groundplanes, the tray having a side wall spaced from the support members to define a gap therebetween.

5. The antenna as specified in Claim 4 wherein the gap is configured to reduce RF current flowing in a backside of the tray.

6. The antenna as specified in Claim 4 wherein a height of the tray sidewalls are configured to increase a front-to-back ratio of a radiation pattern of the antenna.

7. The antenna as specified in Claim 1 wherein a front-to-back ratio of the antenna is at least 40 dB.

8. The antenna as specified in Claim 1 wherein the dipoles have parasitic structure coupled thereto such that the antenna has a front-to-side ratio of at least 20 dB.

9. The antenna as specified in Claim 1 wherein the antenna has a horizontal beam width of between about 59° to 72°.

10. The antenna as specified in Claim 2 wherein the feed network comprises an air dielectric feed network disposed over at least one of the groundplanes.

11. The antenna as specified in Claim 10 wherein the feed network further comprises a stripline feed network disposed on a backside of at least one of the groundplanes.

12. The antenna as specified in Claim 11 wherein the feed network has a dielectric member adjustably disposed over a portion of the microstripline feed network.

13. The antenna as specified in Claim 12 wherein the dielectric member is arcuately adjustable over the microstripline feed network.

14. The antenna as specified in Claim 13 further comprising a shifter rod coupled to the dielectric member, such that selective positioning of the dielectric member adjusts a phase velocity of RF signals communicated through the stripline feed network.

15. The antenna as specified in Claim 2 wherein the downtilt of the antenna element boresights is defined at a midpoint of an overall downtilt of the antenna.

16. The antenna as specified in Claim 1 wherein the groundplanes are staggered a fixed distance from one another.

17. The antenna as specified in Claim 1 wherein the dipole antennas are grouped in pairs, wherein at least one pair of dipoles is defined on each of the groundplanes.

18. The antenna as specified in Claim 17 further comprising a divider coupled to each pair of the dipole pairs.

19. The antenna as specified in Claim 18 wherein each divider has a beak extending through the respective groundplane and is coupled to the feed network disposed under the respective groundplane.

20. The antenna as specified in Claim 19 wherein the feed network comprises an air dielectric feedline extending above the groundplane and a stripline below the groundplane.

21. The antenna as specified in Claim 1 wherein the dipole elements are Yagi dipoles.

22. The antenna as specified in Claim 11 further comprising an RF absorber coupled closely proximate the stripline feed network and being adapted to reduce RF current coupling between stripline portions.